

Figure 1

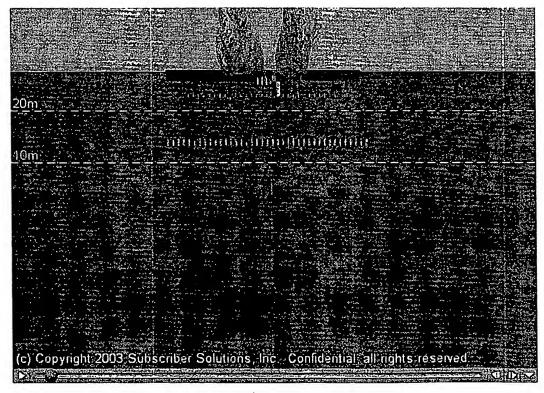


Figure 2

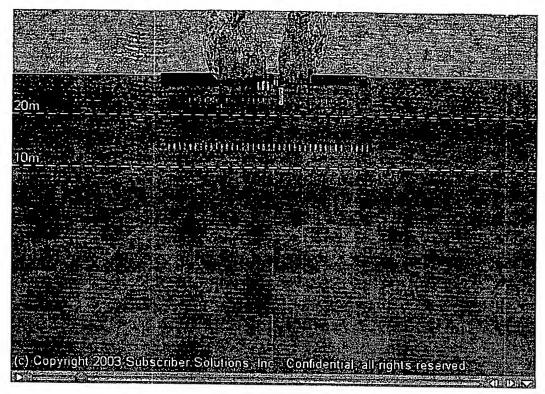


Figure 3

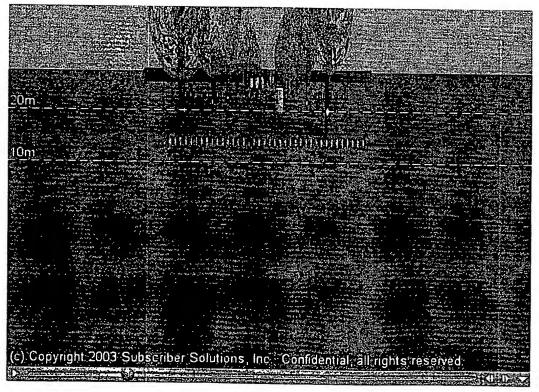


Figure 4

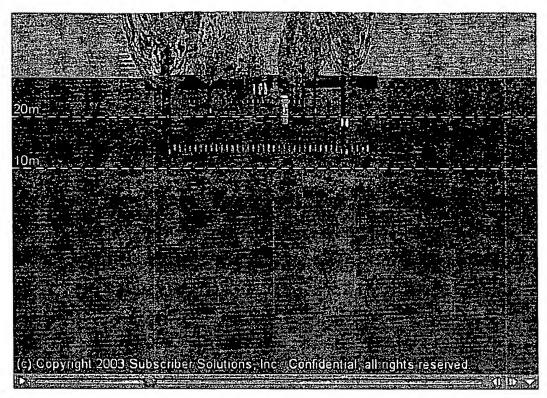


Figure 5

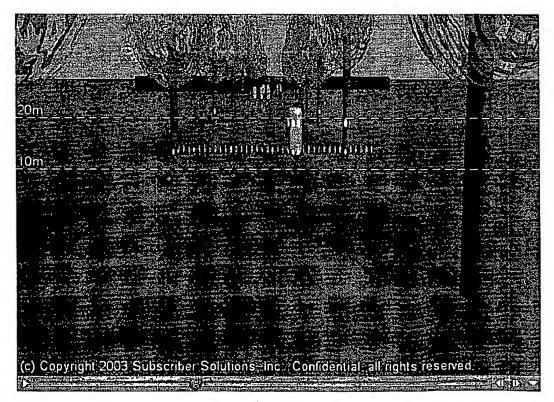


Figure 6



Figure 7

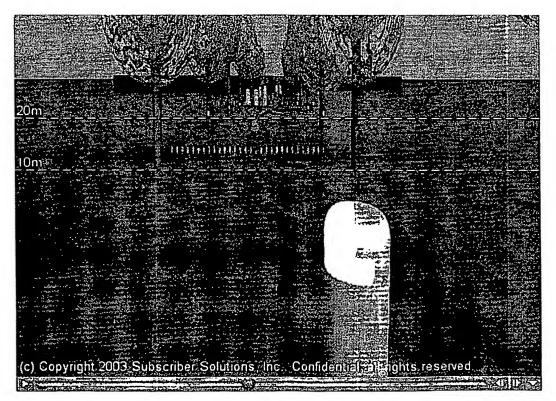


Figure 8

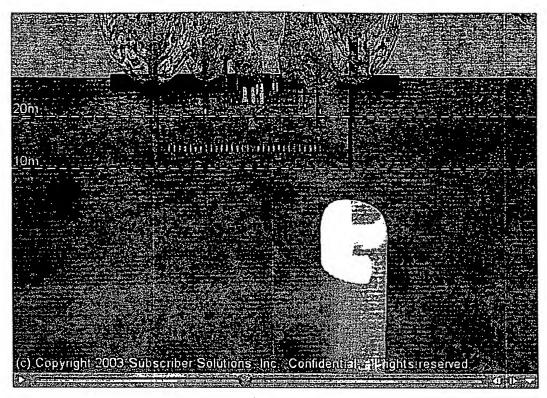


Figure 9

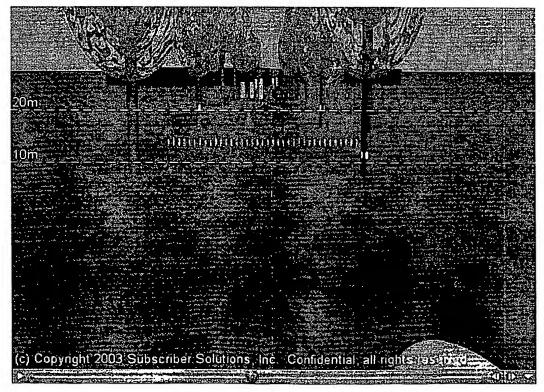


Figure 10

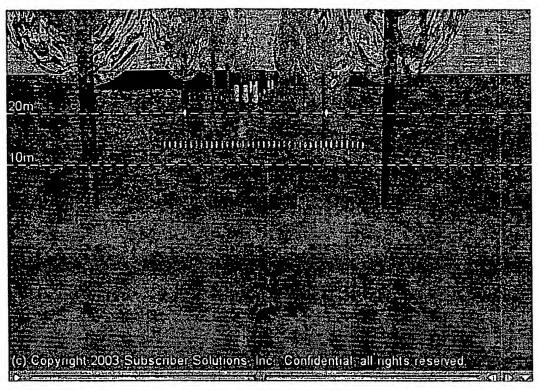


Figure 11

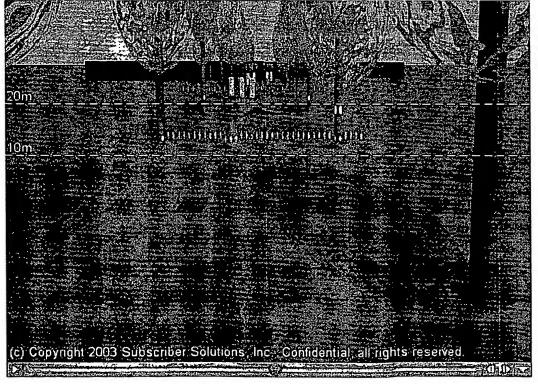


Figure 12

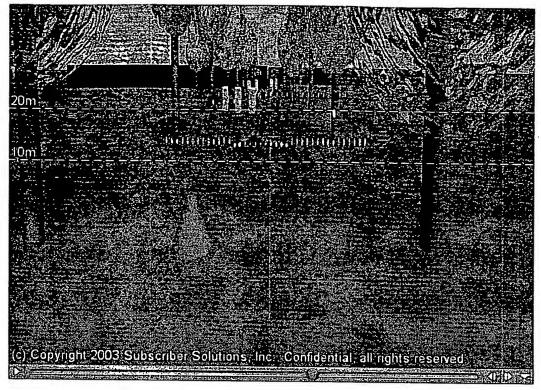


Figure 13

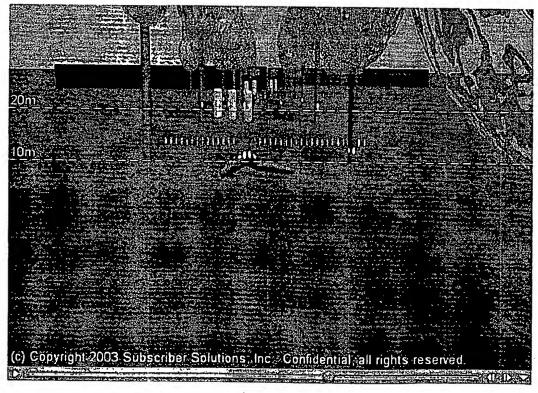


Figure 14

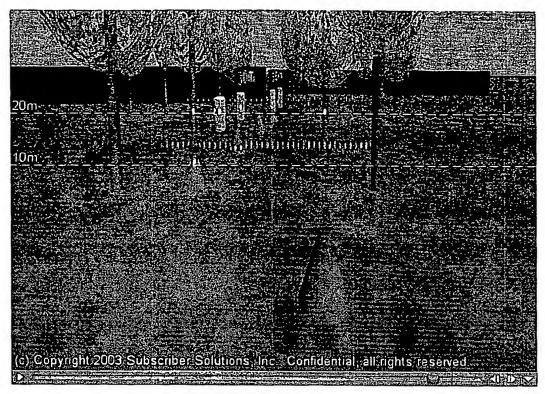


Figure 17

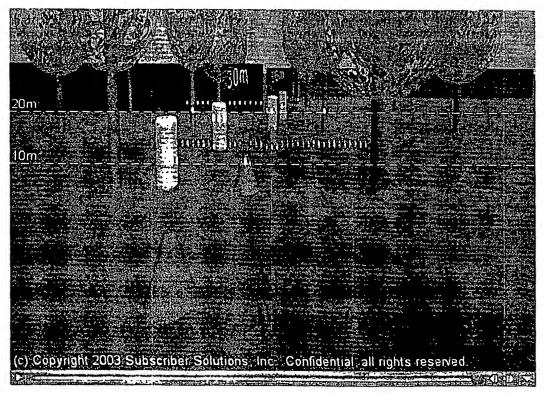


Figure 18

## Ranger illumination patterns

Infrared laser diodes with beamsplitting grating optics are used to create several fields of spots with different powers and elevations, for triangulation ranging by a stereo pair of infrared CCD cameras. Roughly 256 beams are deployed, using 16 laser diodes. Note: this is a hypothetical plan pending detailed design and review.

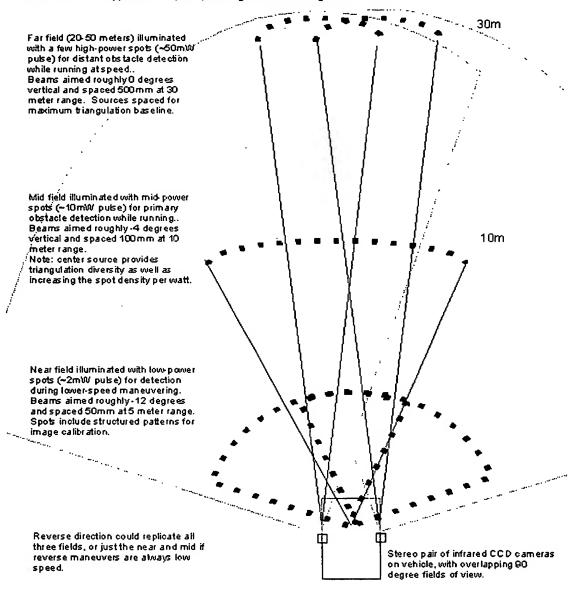


Figure 19

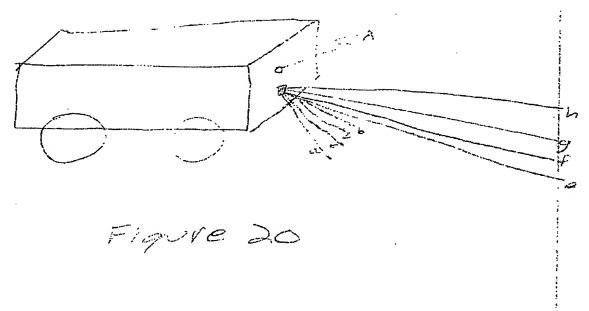


Figure 20

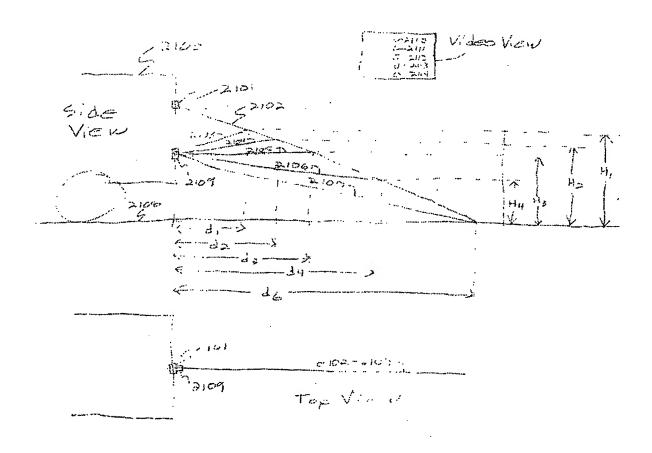


Fig 21

